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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,526	11/21/2003	Rabindra Bhola	12354-003	3377

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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/719,526

Applicant(s)

BHOLA, RABINDRA

Examiner

Gail Verbitsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 7-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 7-13 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/21/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of claims 1-6 in the reply filed on October 21, 2004 is acknowledged. The traversal is on the ground(s) that Invention II is directed to a computer readable media for a die, and that class 374 covers computer readable media. This is not found persuasive because, although, as stated by Applicant, the computer readable media of Invention II is directed to a die control, it is an independent Invention which does not necessarily directed to the particular die of the Invention I (for example, Invention I does not require a processor). Different inventions I, II and II require different search.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans (U.S.5589114).

Evans discloses (col. 7, lines 36-51) a device in the field of applicant's endeavor. The device comprising a temperature regulating system to control continuous cooling flow/ cooling line to regulate temperature of a mold/ mould/ die, wherein an

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instantaneous temperature measurement is done over a cycle/ each cycle/ preset number of cycles, which is three (nominal) (first time interval), if an average temperature shows a consistent rise (this would imply, that the average temperature is rising, it should be compared to some pre-set/ set-point/ threshold/ pre-determined temperature) over a pre-set number or cycles (first time interval), then a valve 14 is controlled by a mode generator 50 determining/ altering/ controlling (and thus, determining a proportion) the duration of the valve opening (control parameter) and opened during a pre-set time/ predetermined stage (second interval) depending (triggered by) on the rate of the average temperature rise, wherein the next cycle (second time interval) is concurrent with an instantaneous temperature which is low and thus the average temperature is low. Evans describes a feed back loop/ control to vary the cooling fluid (col. 8, lines 36-37). It is inherent, that the second interval, since it is resultant of the average temperature rise determined during the first interval, is, at least partially, subsequent to the first interval.

During the operation, a temperature range is controlled within a given/ predetermined temperature range/ band which is pre-set by a unit 86, which inherently, responsive (proportional) to the feedback.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (U.S. 5,589,114).

Evans discloses the device/ method as stated above in paragraph 3.

Evans does not explicitly teach that first and second time intervals are identical in duration, as stated in claim 3. Evans does not explicitly teach that first and second time intervals are equivalent to a nominal die cycle time, as stated in claim 4.

With respect to claim 3: having the first and second time intervals of identical duration, absent any criticality, is only considered to be the "optimum" duration used by Evans that a person having ordinary skill in the art at the time the invention was made would have been able to determine using routine experimentation based, among other things, on the type of the temperature ranges and the duration of each cycle, etc. **See In re Boesch, 205 USPQ 215 (CCPA 1980).**

With respect to claim 4: having the first and second time intervals equivalent to a nominal die cycle time/ duration, absent any criticality, is only considered to be the "optimum" duration used by Evans that a person having ordinary skill in the art at the time the invention was made would have been able to determine using routine experimentation based, among other things, on the type of the temperature ranges and the duration of each cycle, etc. **See In re Boesch, 205 USPQ 215 (CCPA 1980).**

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans in view of Eryurek et al. (U.S. 6,772,036) [hereinafter Eryurek].

Evans discloses the device/ method as stated above in paragraph 3.

Evans does not explicitly teach the limitations of claim 6.

Eryurek teaches to use a controller with a PID (proportional/ integral/ derivative) to operate a valve.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller, disclosed by Evans, so as to implement a PID mode, as taught by Eryurek, so as to control the valve, in order to

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enable the controller to provide a more fine control of the valve by using a well known in the art precise equipment with a neural network.

**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV

Gail Verbitsky

Primary Patent Examiner, TC 2800



December 27, 2004